

Amendments to the Specification:

Page 1, after the title, insert—BACKGROUND OF THE INVENTION—

On page 1, please rewrite the entire first paragraph as follows:

—It is known to cool the graphite electrodes of arc furnaces by spraying cooling water against the surface of the electrodes. For this purpose, arranged underneath the electrode holder attached to the electrode carrying arm is a spray ring, which is formed by a tube to which cooling water is admitted and directs spray nozzles toward the surface of the electrodes (Patent Abstract of Japan 05114479). The cooling has the effect of reducing the electrode consumption and also protecting the clamping devices for the electrode from excessive heat exposure. The known arrangement has the disadvantage that electric arcs which may damage both the cooling device and the electrode holder can occur. This applies in particular if the electrode ruptures; there is then the risk of the electrode holder settling on the stump of the electrode connected to the bath. The same may happen if there are remains of scrap on the furnace.—

Page 1, line 26, insert—SUMMARY OF THE INVENTION—

On page 2, please rewrite the entire second paragraph as follows:

—To make it possible if desired for the cooling device to be ~~provided for a fitted electrode~~ assembled after the electrode is fitted, it may be provided that the annular part 11 of the cooling device is formed in a divided manner.—

Page 2, line 31, insert—BRIEF DESCRIPTION OF THE DRAWINGS—

Page 3, line 6, insert—DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS—

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electrode holder with an electrode cooling device ~~(10)~~ on its underside, characterized in that the electrode cooling device ~~(10)~~ is electrically insulated from the electrode holder ~~(3)~~.
2. (Currently Amended) The electrode holder as claimed in claim 1, characterized in that the electrode cooling device ~~(10)~~ essentially covers the underside of the electrode holder ~~(3)~~.
3. (Currently Amended) The electrode holder as claimed in claim 1 ~~or 2~~, characterized in that the electrode cooling device ~~(10)~~ is fastened to the fixed parts ~~(4, 5)~~ of the electrode holder ~~(3)~~ and is supported on a movable part ~~(6)~~ of the ~~same~~ electrode holder.
4. (Currently Amended) The electrode holder as claimed in claim 1 ~~one of claims 1 to 3~~, characterized in that releasable fastening and supporting elements ~~(22, 25)~~ for the electrode cooling device ~~(10)~~ are arranged above cooled parts of the ~~same~~ electrode cooling device.
5. (Currently Amended) The electrode holder as claimed in claim 4, characterized in that the releasable fastening and supporting elements ~~(22, 25)~~ are accessible from ~~the~~ a side.
6. (Currently Amended) The electrode holder as claimed in claim 1 ~~one of claims 1 to 5~~, characterized in that it comprises spray nozzles ~~(40)~~ which are directed at the electrode ~~(12)~~ and are equipped with a compressed air supply ~~(42, 43)~~.

7. (Currently Amended) The electrode holder as claimed in claim 6, characterized in that the compressed air supply (42) opens out into the nozzle bores (40).

8. (Currently Amended) The electrode holder as claimed in claim 6 or 7, characterized in that a row of spray nozzles (40) is arranged on or in the wall (17) of the cooling device and connected to the wall (17) along this row is a compressed air line (43), from which connecting bores (42) lead to the nozzle bores (40).

9. (Currently Amended) The electrode holder as claimed in claim 6 ~~one of claims 1 to 3~~, characterized in that the spray nozzles have openings and a shield (44) which covers the direct spraying direction from a the bath or an ~~are~~ to the openings is provided underneath the openings of the nozzles (40).

10. (Currently Amended) The electrode holder as claimed in claim 9, characterized in that, underneath the nozzles (40), the cooling device (10) comprises a wall (44) which runs transversely in relation to the direction of the electrode and ~~the~~ an edge (44) of which protrudes further toward the electrode than the nozzles (40), to form the shield.

11. (New) The electrode holder as claimed in claim 2, characterized in that the electrode cooling device is fastened to fixed parts of the electrode holder and is supported on a movable part of the electrode holder.

12. (New) The electrode holder as claimed in claim 2, characterized in that releasable fastening and supporting elements for the electrode cooling device are arranged above cooled parts of the electrode cooling device.

13. (New) The electrode holder as claimed in claim 3, characterized in that releasable fastening and supporting elements for the electrode cooling device are arranged above cooled parts of the electrode cooling device.

14. (New) The electrode holder as claimed in claim 11, characterized in that releasable fastening and supporting elements for the electrode cooling device are arranged above cooled parts of the electrode cooling device.

15. (New) The electrode holder as claimed in claim 2, characterized in that it comprises spray nozzles which are directed at the electrode and are equipped with a compressed air supply.

16. (New) The electrode holder as claimed in claim 3, characterized in that it comprises spray nozzles which are directed at the electrode and are equipped with a compressed air supply.

17. (New) The electrode holder as claimed in claim 4, characterized in that it comprises spray nozzles which are directed at the electrode and are equipped with a compressed air supply.

18. (New) The electrode holder as claimed in claim 5, characterized in that it comprises spray nozzles which are directed at the electrode and are equipped with a compressed air supply.

19. (New) The electrode holder as claimed in claim 7, characterized in that a row of spray nozzles is arranged on or in the wall of the cooling device and connected to the wall along this row is a compressed air line, from which connecting bores lead to the nozzle bores.

20. (New) The electrode holder as claimed in claim 7, characterized in that the spray nozzles have openings and a shield which covers the direct spraying

direction from a bath or an arc to the openings is provided underneath the openings of the nozzles.